

Serial Number: 09/9/0, 087**ENTERED**

O/R #2

☐

Changed a file from non-ASCII to ASCII

☐

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐

Edited a format error in the Current Application Data section, specifically:

☐Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____☐

Added the mandatory heading and subheadings for "Current Application Data".

☐

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

☐

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

☐

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

☐

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐

Inserted colons after headings/subheadings. Headings edited included:

☐

Deleted extra, invalid, headings-used by an applicant, specifically:

☐Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;
☐ page numbers throughout text; ☐ other invalid text, such as _____☐

Inserted mandatory headings, specifically: _____

☐

Corrected an obvious error in the response, specifically: _____

☐

Edited identifiers where upper case is used but lower case is required, or vice versa.

☐

Corrected an error in the Number of Sequences field, specifically: _____

☒

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐

Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☐

Other: _____

_____Examiner: The above corrections must be communicated to the applicant in the first Office
Action: DO NOT send a copy of this form. 3/1/95

RAW SEQUENCE LISTING

DATE: 09/09/2001

PATENT APPLICATION: US/09/910,087

TIME: 18:50:52

Input Set : A:\Pto.amc

Output Set: N:\CRF3\09072001\I910087.raw

SEQUENCE LISTING

C--> 5 (1) GENERAL INFORMATION:
7 (i) APPLICANT: Koopman, Peter
8 Goodfellow, Peter
C--> 10 (ii) TITLE OF INVENTION: SOX-9 GENE AND PROTEIN AND
11 USE IN THE REGENERATION OF BONE OR CARTILAGE
13 (iii) NUMBER OF SEQUENCES: 21
15 (iv) CORRESPONDENCE ADDRESS:
16 (A) ADDRESSEE: Scully, Scott, Murphy & Presser
17 (B) STREET: 400 Garden City Plaza
18 (C) CITY: Garden City
19 (D) STATE: NY
20 (E) COUNTRY: U.S.A.
21 (F) ZIP: 11530
23 (v) COMPUTER READABLE FORM:
24 (A) MEDIUM TYPE: Diskette
25 (B) COMPUTER: IBM Compatible
26 (C) OPERATING SYSTEM: DOS
27 (D) SOFTWARE: FastSEQ Version 1.5
29 (vi) CURRENT APPLICATION DATA:
C--> 30 (A) APPLICATION NUMBER: US/09/910,087
C--> 31 (B) FILING DATE: 20-Jul-2001
32 (C) CLASSIFICATION:
34 (vii) PRIOR APPLICATION DATA:
35 (A) APPLICATION NUMBER: AU PM9714
36 (B) FILING DATE: 29-NOV-1994
38 (A) APPLICATION NUMBER: AU PM9835
39 (B) FILING DATE: 05-DEC-1994
41 (A) APPLICATION NUMBER: PCT/AU95/00799
42 (B) FILING DATE: 29-NOV-1995
44 (viii) ATTORNEY/AGENT INFORMATION:
45 (A) NAME: DiGiglio, Frank S.
46 (B) REGISTRATION NUMBER: 31,346
47 (C) REFERENCE/DOCKET NUMBER: 10981
49 (ix) TELECOMMUNICATION INFORMATION:
50 (A) TELEPHONE: 516-742-4343
51 (B) TELEFAX: 516-742-4366
52 (C) TELEX:
53 (2) INFORMATION FOR SEQ ID NO: 1:
55 (i) SEQUENCE CHARACTERISTICS:
56 (A) LENGTH: 7 base pairs
57 (B) TYPE: nucleic acid
58 (C) STRANDEDNESS: single
59 (D) TOPOLOGY: linear
61 (ii) MOLECULE TYPE: cDNA
63 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
65 AATTAAA

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68 (2) INFORMATION FOR SEQ ID NO: 2:
70     (i) SEQUENCE CHARACTERISTICS:
71         (A) LENGTH: 19 base pairs
72         (B) TYPE: nucleic acid
73         (C) STRANDEDNESS: single
74         (D) TOPOLOGY: linear
76     (ii) MOLECULE TYPE: cDNA
78     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
80 CCAAAGTCCT AAAGGTGGG                                     19
83 (2) INFORMATION FOR SEQ ID NO: 3:
85     (i) SEQUENCE CHARACTERISTICS:
86         (A) LENGTH: 19 base pairs
87         (B) TYPE: nucleic acid
88         (C) STRANDEDNESS: single
89         (D) TOPOLOGY: linear
91     (ii) MOLECULE TYPE: cDNA
93     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
95 TTTCAGGCAA ATAAGGCAG                                     19
98 (2) INFORMATION FOR SEQ ID NO: 4:
100    (i) SEQUENCE CHARACTERISTICS:
101        (A) LENGTH: 20 base pairs
102        (B) TYPE: nucleic acid
103        (C) STRANDEDNESS: single
104        (D) TOPOLOGY: linear
106    (ii) MOLECULE TYPE: cDNA
108    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
110 TGGCAATCTA ACAGATGAGA                                     20
113 (2) INFORMATION FOR SEQ ID NO: 5:
115    (i) SEQUENCE CHARACTERISTICS:
116        (A) LENGTH: 20 base pairs
117        (B) TYPE: nucleic acid
118        (C) STRANDEDNESS: single
119        (D) TOPOLOGY: linear
121    (ii) MOLECULE TYPE: cDNA
123    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
125 TCNCAAATGT CATATATCCA                                     20
128 (2) INFORMATION FOR SEQ ID NO: 6:
130    (i) SEQUENCE CHARACTERISTICS:
131        (A) LENGTH: 22 base pairs
132        (B) TYPE: nucleic acid
133        (C) STRANDEDNESS: single
134        (D) TOPOLOGY: linear
136    (ii) MOLECULE TYPE: cDNA
138    (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
140 AGTCCAGATT GACTGGAACA CA                                   22
143 (2) INFORMATION FOR SEQ ID NO: 7:
145    (i) SEQUENCE CHARACTERISTICS:
146        (A) LENGTH: 24 base pairs
147        (B) TYPE: nucleic acid

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148         (C) STRANDEDNESS: single
149         (D) TOPOLOGY: linear
151     (ii) MOLECULE TYPE: cDNA
153     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
155 GCAATAAGAT ACTAATATGT AGAG                                     24
157 (2) INFORMATION FOR SEQ ID NO: 8:
159     (i) SEQUENCE CHARACTERISTICS:
160         (A) LENGTH: 20 base pairs
161         (B) TYPE: nucleic acid
162         (C) STRANDEDNESS: single
163         (D) TOPOLOGY: linear
165     (ii) MOLECULE TYPE: cDNA
167     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
169 GTCAGCAGAA ATCTTAAAGG                                     20
172 (2) INFORMATION FOR SEQ ID NO: 9:
174     (i) SEQUENCE CHARACTERISTICS:
175         (A) LENGTH: 20 base pairs
176         (B) TYPE: nucleic acid
177         (C) STRANDEDNESS: single
178         (D) TOPOLOGY: linear
180     (ii) MOLECULE TYPE: cDNA
182     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
184 GACTAATGCC GATGGTTAAG                                     20
187 (2) INFORMATION FOR SEQ ID NO: 10:
189     (i) SEQUENCE CHARACTERISTICS:
190         (A) LENGTH: 20 base pairs
191         (B) TYPE: nucleic acid
192         (C) STRANDEDNESS: single
193         (D) TOPOLOGY: linear
195     (ii) MOLECULE TYPE: cDNA
197     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
199 CGCCTCGAGG TGGCTTATCG                                     20
202 (2) INFORMATION FOR SEQ ID NO: 11:
204     (i) SEQUENCE CHARACTERISTICS:
205         (A) LENGTH: 25 base pairs
206         (B) TYPE: nucleic acid
207         (C) STRANDEDNESS: single
208         (D) TOPOLOGY: linear
210     (ii) MOLECULE TYPE: cDNA
212     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
214 ATCATACACA TACGATTTAG GTGAC                                     25
217 (2) INFORMATION FOR SEQ ID NO: 12:
219     (i) SEQUENCE CHARACTERISTICS:
220         (A) LENGTH: 19 base pairs
221         (B) TYPE: nucleic acid
222         (C) STRANDEDNESS: single
223         (D) TOPOLOGY: linear
225     (ii) MOLECULE TYPE: cDNA
227     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

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229 GAGGAAGTCG GTGAAGAAC 19
232 (2) INFORMATION FOR SEQ ID NO: 13:
234 (i) SEQUENCE CHARACTERISTICS:
235 (A) LENGTH: 21 base pairs
236 (B) TYPE: nucleic acid
237 (C) STRANDEDNESS: single
238 (D) TOPOLOGY: linear
240 (ii) MOLECULE TYPE: cDNA
242 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
244 TCGCTCATGC CGGAGGAGGA G 21
247 (2) INFORMATION FOR SEQ ID NO: 14:
249 (i) SEQUENCE CHARACTERISTICS:
250 (A) LENGTH: 21 base pairs
251 (B) TYPE: nucleic acid
252 (C) STRANDEDNESS: single
253 (D) TOPOLOGY: linear
255 (ii) MOLECULE TYPE: cDNA
257 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
259 GCAATCCCAG GGCCCACCGA C 21
261 (2) INFORMATION FOR SEQ ID NO: 15:
263 (i) SEQUENCE CHARACTERISTICS:
264 (A) LENGTH: 22 base pairs
265 (B) TYPE: nucleic acid
266 (C) STRANDEDNESS: single
267 (D) TOPOLOGY: linear
269 (ii) MOLECULE TYPE: cDNA
271 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
273 TTGGAGATGA CGTCGACTGC TC 22
276 (2) INFORMATION FOR SEQ ID NO: 16:
278 (i) SEQUENCE CHARACTERISTICS:
279 (A) LENGTH: 20 base pairs
280 (B) TYPE: nucleic acid
281 (C) STRANDEDNESS: single
282 (D) TOPOLOGY: linear
284 (ii) MOLECULE TYPE: cDNA
286 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
288 GCAGCGACGT CATCTCCAAC 20
291 (2) INFORMATION FOR SEQ ID NO: 17:
293 (i) SEQUENCE CHARACTERISTICS:
294 (A) LENGTH: 21 base pairs
295 (B) TYPE: nucleic acid
296 (C) STRANDEDNESS: single
297 (D) TOPOLOGY: linear
299 (ii) MOLECULE TYPE: cDNA
301 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
303 GCTGCTTGA CATCCACACG T 21
306 (2) INFORMATION FOR SEQ ID NO: 18:
308 (i) SEQUENCE CHARACTERISTICS:
309 (A) LENGTH: 2249 base pairs

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310      (B) TYPE: nucleic acid
311      (C) STRANDEDNESS: single
312      (D) TOPOLOGY: linear
314      (ii) MOLECULE TYPE: cDNA
316      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
318  AGTTTCAGTC CAGGAAC TTT TCTTTGCAAG AGAGACGAGG TGCAAGTGGC      50
320  CCCGGTTTCG TTCTCTGTTT TCCCTCCCTC CTCTCCGCT CCGACTCGCC      100
322  TTCCCCGGGT TTAGAGCCGG CAGCTGAGAC CCGCCACCCA GCGCCTCTGC      150
324  TAAGTGCCCG CCGCCGCAGC CCGGTGACGC GCCAACCTCC CCGGGAGCCG      200
326  TTCGCTCGGC GTCCGCGTCC GGGCAGCTGA GGAAGAGGA GCGCCAGCCG      250
328  CCGCGGCTTC TCGCCTTTCC CGGCCACCCG CCCCCTGCCC CGGGCTCGCG      300
330  TATGAATCTC CTGGACCCCT TCATGAAGAT GACCGACGAG CAGGAGAAGG      350
332  GCCTGTCTGG CGCCCCAGC CCCACCATGT CGGAGGACTC GGCTGGTTCG      400
334  CCCTGTCCCT CGGGCTCCGG CTCGGACACG GAGAACACCC GGCCCCAGGA      450
336  GAACACCTTC CCAAGGGCG AGCCGGATCT GAAGAAGGAG AGCGAGGAAG      500
338  ATAAGTTCCC CGTGTGCATC CGCGAGGCGG TCAGCCAGGT GCTGAAGGGC      550
340  TACGACTGGA CGCTGGTGCC CATGCCCGTG CGCGTCAACG GCTCCAGCAA      600
342  GAACAAGCCA CACGTCAAGC GACCCATGAA CGCCTTCATG GTGTGGGCGC      650
344  AGGCTGCGCG CAGGAAGCTG GCAGACCAGT ACCCGCATCT GCACAACGCG      700
346  GAGCTCAGCA AGACTCTGGG CAAGCTCTGG AGGCTGCTGA ACGAGAGCGA      750
348  GAAGAGACCC TTCGTGGAGG AGGCGGAGCG GCTGCGCGTG CAGACAAGA      800
350  AAGACCACCC CGATTACAAG TACCAGCCCC GGCGGAGGAA GTCGGTGAAG      850
352  AACGGACAAG CGGAGGCCGA AGAGGCCACG GAACAGACTC ACATCTCTCC      900
354  TAATGCTATC TTCAAGGCGC TGCAAGCCGA CTCCCCACAT TCCTCCTCCG      950
356  GCATGAGTGA GGTGCACTCC CCGGGCGAGC ACTCTGGGCA ATCTCAGGGT      1000
358  CCGCCGACCC CACCCACCAC TCCCAAAACC GACGTGCAAG CTGGCAAAGT      1050
360  TGATCTGAAG CGAGAGGGGC GCCCTCTGGC AGAGGGGGGC AGACAGCCCC      1100
362  CCATCGACTT CCGCGACGTG GACATCGGTG AACTGAGCAG CGACGTCATC      1150
364  TCCAACATTG AGACCTTCGA CGTCAATGAG TTTGACCAAT ACTTGCCACC      1200
366  CAACGGCCAC CCAGGGGTTC CGGCCACCCA CGGCCAGGTC ACCTACACTG      1250
368  GCAGTTACGG CATCAGCAGC ACCGCACCCA CCCCTGCGAC CGCGGGCCAC      1300
370  GTGTGGATGT CGAAGCAGCA GGCGCCGCCC CCTCCTCCGC AGCAGCCTCC      1350
372  GCAGGCCCCG CAAGCCCCAC AGGCGCCTCC GCAGCAGCAA GCACCCCGC      1400
374  AGCAGCCGCA GGCACCCACG CAGCAGCAGG CACACACGCT CACCACGCTG      1450
376  AGCAGCGAGC CAGGCCAGTC CCAGCGAACG CACATCAAGA CGGAGCAGCT      1500
378  GAGCCCCAGC CACTACAGGG AGCAGCAGCA GCACTCCCCG CAACAGATCT      1550
380  CCTACAGCCC CTTCAACCTT CCTCACTACA GGCCCTCCTA CCCGCCCATC      1600
382  ACCCGTTCGG AATACGACTA CGCTGACCAT CAGAACTCCG GCTCCTACTA      1650
384  CAGTCACGCA GCCGGCCAGG GCTCAGGGCT CTACTCCACC TTCACTTACA      1700
386  TGAACCCCGC GCAGCGCCCC ATGTACACCC CCATCGGTGA CACCTCCGGG      1750
388  GTCCCTTCCA TCCCGCAGAC CCACAGCCCG CAGGACTGGG AACAACCACT      1800
390  CTACACACAG GTCACCAGAC CCTGAGAAGA GAAAAGCTAT GGTGACAGAG      1850
392  CTGATCTTTT TTTTTTTTTT TTTTAAAGA AGAAAAGAAA GAAACGAAAA      1900
394  AGAAAAAGCT GAAGGAAATC AAGAACCAAT TGAAATTCCCT TTGGACACTT      1950
396  TTTTTTTTGT CCTTTCGTTA ATTTTAAAA GACATGTAAA GGAAGGTAAC      2000
398  GATTGCTGGG CATTCCAGGA GAGAGACTTT AAGACTTGT CTGAGCTCAT      2050
400  GACAACATAT TGCAAAATGGC CGGGCCACTC GTGGCCAGAC GGACAGCACT      2100
402  CCTGGCCAGA TGGACCCACC AGTATCAGCG AGGAGGGGCT TGTCTCCTTC      2150
404  AGAGTTAACA TGGAGGACGA TTGGAGAATC TCCCTGCCTG TTTGGACTTT      2200

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VERIFICATION SUMMARY

DATE: 09/09/2001

PATENT APPLICATION: US/09/910,087

TIME: 18:50:53

Input Set : A:\Pto.amc

Output Set: N:\CRF3\09072001\I910087.raw

L:5 M:220 C: Keyword misspelled or invalid format, [(1) GENERAL INFORMATION:]
L:10 M:220 C: Keyword misspelled or invalid format, [(ii) TITLE OF INVENTION:]
L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:417 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19